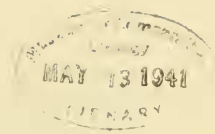


28.898



TRANSACTIONS  
OF THE  
SAN DIEGO SOCIETY OF NATURAL HISTORY

VOLUME IX, No. 28, pp. 285-288

APRIL 30, 1941

---

A NEW CHUCKWALLA FROM SANTA CATALINA  
ISLAND, GULF OF CALIFORNIA, MEXICO

BY

CHARLES E. SHAW

*San Diego Society of Natural History*

In connection with a study of the genus *Sauromalus* I have recently examined three chuckwallas from Santa Catalina Island, Gulf of California, Mexico, which, although closely related to *S. slevini* of Monserrate, Carmen, and Los Coronados Islands, also in the Gulf of California, are sufficiently distinct from that form to warrant description. I therefore describe this new form as

***Sauromalus klauberi* sp. nov.**

SANTA CATALINA ISLAND CHUCKWALLA

*Type Specimen*.—No. 6859, an adult male in the collection of L. M. Klauber. Collected on Santa Catalina Island, Gulf of California, Mexico, December 14, 1931, by J. R. Pemberton. Two paratypes, LMK 6860-61, with the same data as the type specimen, are also available.

*Diagnosis*.—A medium sized chuckwalla intermediate in scalation between *S. slevini* and *S. ater*, but differing from both in having the body spotted rather than transversely banded across the back. *Klauberi* may also be distinguished by its large, spinose, nuchal scales irregularly disposed among those of much smaller size, and by the presence between the shoulders of enlarged, strongly spinose, scales which border each side of the median band of enlarged dorsal scales. In general the scalation is finer than that of *slevini* with a consequent increase in the number of ventral scale rows between the anus and the gular fold.

*Description of the Type*.—Form stout; the head and body much depressed

and the latter very broad with a strong lateral fold. The head is relatively short, wider than long, slightly concave across the top and sloping gently toward the snout. On top, the head is covered with small convex plates, largest on the frontal and parietal regions and becoming tubercular and subconical in the latter area. Supraoculars and superciliaries small and non-imbricate. The nostrils open upward and outward in a single rounded plate much nearer the tip of the snout than the orbit. The rostral is vertically divided into four scales of equal size and shape. The supralabials are small and subequal, the anterior third being higher than wide, the others wider than high. The suboculars are short and strongly keeled and, following the contour of the orbit, pass upward and backward to a point just below and slightly behind the posterior border of the eye. This line of suboculars is continued to the anterior border of the ear opening by four tubercular and subconical scales. The ear opening is large and nearly vertical, with an anterior denticulation consisting of two adjacent strongly spinose scales bordered by two much smaller scales of the same shape. Immediately behind the ear opening is a prominent neck fold bearing numerous large, subconical, spinose scales interspersed with smaller scales of the same shape. The infralabials are small and about equal in size. The mental is subtriangular and longer than wide. Below the infralabials are several series of sublabials which grade gradually into the very small and feebly spinose gulars. There is a prominent gular fold.

The nuchal scales are irregular in size, there being large, subconical, spinose scales scattered among much smaller scales of the same shape. The largest nuchals are somewhat smaller than the largest scales of the postauricular fold. Above the shoulder is a group of enlarged, spinose scales. Dorsally there is a median band of nearly square scales, ranging in width from about 12 scales between the shoulders to about 18 a short distance anterior to the insertion of the hind limbs. Posteriorly these have a weak spine formed by the slight projection of one corner of the scale. Anteriorly, between the shoulders, the median scales are somewhat larger and bordered on each side by enlarged and strongly spinose scales. There are 26 scales in a head length at the center of the body. Laterally the scales are much reduced in size, imbricate, nearly square, and spinose, becoming larger on the prominent lateral fold. The ventral scales are somewhat smaller than the median dorsals, square, imbricate, and feebly spinose. There are 131 rows of scales from the anus to the gular fold.

Above, the scales of the arms are large, spinose and feebly keeled; below, spinose and greatly reduced in size. The upper part of the hind limb is covered with smooth and keeled spinose scales, smallest below. On the lower part of the hind limb the scalation is coarser, obtusely spinose and strongly keeled. The femoral pores are prominent and number 14-16.

The tail is depressed at its base and bears numerous whorls of square scales which are strongly spinose everywhere except at the base where dorsally and ventrally they are only feebly spinose. There are 44 scales in a single whorl at the thickest part of the tail.

Owing to the fact that this specimen was probably preserved in formalin at the time of its capture the coloration is much darker than would be expected in a

living specimen. The ground color above is dark brown becoming nearly black on the head. Dorsally the body is spotted with dark brown. The ground color of the gular region and the belly is grayish white, the gular region being spotted with brown. The chest is longitudinally streaked with reddish brown and the belly is immaculate except laterally, where brown spots are faintly in evidence. Above, the tail is greenish gray with scattered scales of dark brown; below, yellowish brown for about one-half its length, then becoming brownish gray to the tip. Near the base of the tail some of the scales are edged anteriorly with yellow.

*Measurements of the Type.*—Total length, 273; length of body from tip of snout to anus, 154; tail length, 119 (incomplete); width of head, 33; length of head from rostral to anterior edge of ear opening, 30.8; length of hind leg, 95.7. (All measurements in millimeters.)

*Variations in the Paratypes.*—Both paratypes agree essentially in characters of scalation with the type. However, LMK 6861, a juvenile male 205 mm. in length, shows more clearly the distinctive markings of *klauberi*. The top of the head is dark brown, becoming lighter on the sides. The supralabials and the rostral are yellow, edged with dark gray above. The infralabials and the sublabials are yellowish. Immediately before the ear opening there is a dark gray spot. The postauricular spines and some of the nuchals are tipped with yellow. The gular region is irregularly streaked with brown and dotted with yellow. The reddish brown longitudinal streaks on the chest, so prominent in the other specimens, are only very faintly in evidence. The ground color of the back is dark gray, except medianly, where it is considerably lighter. Medianly there are small, red-brown irregularly scattered spots which become darker brown laterally. The limbs are dark gray and spotted with reddish brown. The ground color of the tail is also gray and near its base is spotted with yellow.

*Remarks.*—*Klauberi* is undoubtedly more closely related to *slevini* than to any other species of the genus, but this is to be expected in view of the geographical position of Santa Catalina Island. The scalation is, however, finer than that of *slevini* and in this respect *klauberi* shows an approach to *ater*, which inhabits the islands to the south of Santa Catalina.

In *slevini* the transverse body bands, quite prominent in the juveniles, tend to become less evident with increasing age until only traces of these markings are apparent in adults. No specimens of *slevini* were examined which completely lacked body bands, but two juveniles possessed only two of these markings, the remainder of the back being sprinkled with large brown spots.

Some of the differences between the three forms which occupy the islands in the Gulf of California off the eastern coast of the peninsula from the vicinity of Loreto south to La Paz are shown as follows:<sup>1</sup>

<sup>1</sup>Based on 3 specimens of *klauberi*, 17 *slevini* and 10 *ater*. The central figure indicates the average, the other figures the extremes.

	<i>slevini</i>	<i>klauberi</i>	<i>ater</i>
Ventral scale rows from gular fold to anus.	107-115-123	128-130-132	130-137-142
Number of scales in a single whorl around the thickest part of the tail.	37-40-43	43-44-45	52-57-64
Number of transverse body bands	2 to 4	None	4 or 5 <sup>2</sup>

*Klauberi*, like the other species of the genus, is herbivorous. Material taken from the large intestine of the three specimens has been kindly identified by Mr. F. F. Gander of the San Diego Natural History Museum as follows: leaflets of *Cercidium floridum*; fruits of *Euphorbia* sp.; parts of a spikelet of *Festuca* sp.; and leaves of *Acacia greggii*. The large intestine of the type specimen contained 14 unidentifiable hard-shelled seeds somewhat resembling a piñon nut in shape but smaller.

The large intestine of each of the three specimens also contained a large number of nematodes, which, according to Dr. L. R. Penner of the Research Hospital of the San Diego Zoo, represent two or more new species of the genus *Alaewris*.

---

<sup>2</sup>Usually four, but in juveniles there is a band on the neck which is lacking in the older specimens.